

- E. Limitations of management science methodologies and techniques
- F. What information is needed for disciplined management decision-making?
- G. Who needs the information, where is it, who provides it?
- H. Should management scientists manage?
- Examples of practical results achieved through the application of management science

V. Technology for MIS

- A. Present status and future trends in MIS hardware and systems approaches
- B. Developments in computers, storage devices, display devices and communications
- Impact of mini-computers and computer utilities
- Role of higher level languages for managers, systems analysts and programmers
- E. Cost/performance implications of new technology for period 1970-1980
- Adapting the MIS to changing technology through emulation, higher level languages and other means

VI. Managing the MIS Function

- MIS project organization, management and control
- B. Human resources for MIS development
- C. Qualifications of the MIS director:

 1. Should he have a technical background?
- Relationship of the MIS director to top management and line management
- E. Problems in justification of MIS
- F. Selection and utilization of outside consultants, contractors and packages
- G. Examples of MIS project organization and system development experience

VII. Case Studies of MIS Development

- A. Manufacturing company
- B. Financial institution

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SEMINAR FACULTY

Robert V. Head - Course Director

Robert V. Head is nationally known as an author, speaker and consultant in the information systems field. A Phi Beta Kappa, Mr. Head was formerly with IBM's Systems Research Institute; Vice President, Security National Bank; and President, Software Resources. He is an editor of Datamation and the Journal of Systems Management. He is also the author of Real-Time Business Systems, Holt, Rinehart & Winston. A frequent speaker at national meetings, his numerous articles and papers on information systems have appeared in almost every major business publication. Mr. Head has over 14 years experience in information systems design and is currently President of the Society for Management Information Systems.



Richard F. Coleman is President of Applied Computer Technology in San Francisco. Formerly Director of Automation for the U.S. Savings and Loan League, he established their Computer Service Division. As Planning Manager of Montgomery Ward, he developed the Planning and Management Information Systems for their expansion program. He has held academic posts with the University of San Francisco and the University of California and served as staff speaker for the USF Management Development Center.



Dr. James V. Milano is Director of Corporate Information Services of Chas. Plizer & Co., Inc. Formerly Chief of Systems for the U.S. Army, Dr. Milano has served on the faculty of George Washington University. An experienced lecturer, he is the author of numerous systems, articles, among them: "Modular Method of Structuring MIS."



John S. Christenson is Manager of Computer Applications & Services for Caltex Petroleum Corp. in New York. Mr. Christenson, in systems development since 1957, was the project manager of the original Caltex MIS, which has been operating since 1963.



Richard E. Sprague is President of Personal Data Services Corp. Formerly Vice President of Computer Research Corp., he was a Partner and Director of Advanced Business Systems for Touche, Ross, Bailey and Smart. Author of Electronic Business Systems, Mr. Sprague has an extraordinarily wide background in information systems development.



Albert E. Suter is Executive Vice President of L. B. Knight Associates, a leading management consulting firm. The holder of BME and MBA degrees, Mr. Suter is a frequent speaker at national societies and is best known for his work in informations systems and control.



Robert N. Hodgson is Vice President and Director of Management Planning Systems of Synergistic Software Systems in Houston. Formerly with IBM and Continental Oil, he has been in corporate information systems development since 1957. Mr. Hodgson is the author of Management and The Computer in Information and Control Systems, McGraw Hill.



MANAGEMENT INFORMATION SYSTEMS

San Francisco—January 6-8

The Fairmont Hotel

Chicago—February 8-10

The Conrad Hilton Hotel

New York—March 1-3

The Roosevelt Hotel

The concept of integrated management information systems was originally highly promoted and taken quite seriously. Initial efforts were received with great expectation but were followed by a record of mild successes and substantial disenchantment. Much has been learned in the intervening time; and based upon the information gained from painful starts, companies have only recently been able to operate economically successful systems. David Hertz, Pres. of McKinsey & Co., estimates that 125 companies are today profitably operating computer-based management information systems.

Among many timely elements studied will be the planning process and the incorporation of "what if" models into the system to aid general managers in planning decisions.

In view of the extensive nature of the subject, each lecturer has been chosen for his outstanding reputation, superior expertise and precise knowledge of a specific area of MIS development.

About AMR

AMR is a leading management education organization structured to fill the need for a superior level of management information. It distinguishes itself from other organizations on the basis of objectivity and quality. AMR is an entirely independent educational organization, not affiliated with software, consulting, or any other type firms. To maintain its reputation for excellence, AMR retains a continuing faculty of distinguished business leaders, practitioners and researchers from industry, government and the professions.

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SEMINAR OUTLINE

I. MIS—A Conceptual Overview

- A. What is an MIS?
- B. Why have one?
- C. Is MIS really new?
- D. Evolution of MIS E. Theory of MIS
- F. Continuity of MIS with earlier principles:
 - 1. Scientific management
 - 2. Management by exception

II. Developing the Data Base

- A. Data base concepts and state of the art
- B. Data base organization principles and techniques
- C. Levels of data base organization and usage
- Principles and limitations of information retrieval
- E. Data management systems, languages and software
- F. Approaches to data elements identification and definition
- G. Redundancy problems in data base organization, development and usage
- H. Role of specialized data bases for different industries
- . Trends in data management systems and software
- J. Examples of data base organization and development

III. Organization Impact of MIS

- A. Overall impact of MIS on corporate organization and management
- B. Role of top management in MIS design, development and usage

IV. Role of Management Science in MIS

- A. What is management science (operations research)?
- B. Quantitative approaches to decisionmaking by means of modeling, linear and non-linear programming, etc.
- C. Programmed versus non-programmed decisions
- D. Decision-making under conditions of uncertainty

A partial list of clients and some of those firms whose key executives have

AT&T
Allis-Chalmers
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Colgate-Palmolive
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Management Information Systems\$350.

SEND TEAMS: Send a group of executives in order to benefit from different management viewpoints and interaction. Company registrations for three, including luncheons and materials \$295 per person. Other discounts available for larger groups. Please contact AMR for details.

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	(To be used in conjunction with AFM 36-1)	

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	46	MUNITIONS	4625 A B	Acropace Munitions Staff Officer Acropace Munitions Officer Munitions 200
	47	MOTOR VEHICLE MAINTENANCE	4716 4724	Motor Vehicle Maintenance Staff Officer Motor Vehicle Maintenance Officer
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	60	TRANSPORTATION	6016 6044	Transportation Staff Officer Transportation Officer
	62	SUPPLY SERVICES	6216 6224 6234 6244	Supply Services Staff Officer Supply Survices Operations Officer Supply Services Sales Officer Food Services Officer
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	65	PROCUREMENT MANAGEMENT	6516 6524 6534	Procurement Management Staff Officer Production Officer Procurement Officer
	66	LOG ISTICS	6616 6624	logistics Staff Officer logistics Officer
CONFROLLER	67	FINANCIAL	6716 6724 6736 6746 6784 6796	Accounting and Finance Staff Officer Accounting and Finance Officer Surget Officer Cost Analysis Officer Auditor, Staff
	68	DATA AUTOMATION	6816 6855 6896	Data Automation Staif Officer Data Automation Officer Management Analysis Officer

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23	70	ADMINISTRATIVE SERVICES	7016 7024	Administrative Staff Officer Administrative Officer
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200	75	EDUCATION AND TRAINING	7516 7524 7535	Education and Training Staff Officer Education and Training Officer Instructor
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INTELLIGENCE	80	INTELLIGENCE	8016 8035 8045 8064 8086 8095	Intelligence Staff Officer Signals Intelligence Officer Intelligence Photo-Redar Officer Intelligence Officer Air Targets Officer Air Textical Intelligence Officer
SECURITY	81	SECURITY POLICE	8116 8124	Security Police Staff Officer Security Police Officer
	82	SPECIAL INVESTIGATIONS	8216 8224	Special Investigations Staff Officer Special Investigations Officer
TEGET	88	LEGAL	8816 8824	Legal Staff Officer Legal Officer
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	90	MEDICAL SERVICES	9016 9025 9035	Nedical Administrative Staff Officer Medical Administrative Officer Medical Supply Officer
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IDENTIFIES	ILLE
0001	Patient General Officer
0003	Air Officers Commanding, USAFA Unallutted
0005 0006	Nuclear Weapons Custodian Filot Traines
0007 0008 0009	Navigator Trainse Air Attache Victor Alert Duty Officer

AF3C	TITLE
0016	Director of Personnel Managemen
0026	Organization Commander
0036	Director of Operations
0046	Director of Materiel
2056	Comptroller
0066	Air Commander
0076	Flanning and Programming Office
0086	Missile Commander

AF3C	TIME
0216	International Politico-Milita
0316	Affairs Officer Special Air Warfare Officer
0415	Open Moss Secretary

	INTERIM AFSC
AFSC.	TINE
0105	Disaster Preparedness Officer

REFIX	TIME
в	Radio Frequency Allocation Offi
C	Automated Systems Analyst
D	Automated Systems Program Design
2	SSIR Cualification
D E F	Flight Test Maintenance
9	Pilot
н :	Navigator-Chaerver
K	Area Specialist
L	Area Specialist
м	Area Specialist
N	Area Specialist
P	Parachutist
R	Material Requirements
8	Fighter Weapons Instructor
т	Technical Instructor
¥	Medical Research Manager
I	Advanced Medical Research
Y	Analytical Studies Officer

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